

REMARKS

I. Status of the Claims

Claims 1-100 are pending in the application. Claims 18-23, 34-43 and 45-96 have been withdrawn pursuant to a restriction requirement, and therefore claims 1-17, 24-33, 44 and 97-100 are under examination. Claims 7-17 and 97-100 stand rejected, and claims 1-6, 24-33 and 44 are objected to. The specific grounds for objection and rejection are set forth in detail below, along with applicants' response.

II. Objections

Claims 1-6 are objected to in light of the phrase "an amino acid sequence of SEQ ID NO:1." Applicants have provided the suggested amendment.

Claim 97 is objected to on grammatical reasons. The suggested amendment has been made.

Claims 1, 24 and 44 have been amended to remove the non-elected subject matter.

Reconsideration and withdrawal of the objections is respectfully requested.

III. Rejection Under 35 U.S.C. §101

Claims 7-17 stand rejected under §101 as reading on naturally-occurring sequences. Applicants have amended the claims as suggested by the examiner to insert "isolated and purified" into the preamble. Reconsideration and withdrawal of the rejection is, therefore, respectfully requested.

IV. Rejection Under 35 U.S.C. §112, First Paragraph

Claims 7-17 and 97-100 are rejected as lacking an enabling disclosure. The examiner argues that only full length sequences that encode a functional tumor suppressor are enabled, and it is unclear which fragments or variants would retain tumor suppressor function. Applicants traverse.

The flaw in the rejection is the assumption that the *only* enabling aspect of the invention is the use of the claimed nucleic acids to encode a functional tumor suppressor. However, this is clearly not the case. Small fragments of SEQ ID NO:3 may, in fact, be used as primers for amplifying larger sequences, or as probes for detecting larger sequences. In this regard, applicants direct the examiner to pages 23-25 of the specification for such disclosure. The fact that the sequences may cross hybridize with other sequences does not denude these claims of enablement, as SEQ ID NO:3 may be amplified in environments where competing sequences are not present.

In light of these teachings, and the explanation set forth above, applicants respectfully submit that one of skill in the art could easily make and use the claimed invention. Thus, reconsideration and withdrawal of the rejection is respectfully requested.

V. Rejections Under 35 U.S.C. §102

A. *Waterson*

Claims 7-15 and 97-100 stand rejected as anticipated by Waterson. The examiner states that Waterson discloses stretches of nucleotides that are 100% identical to SEQ ID NO: 3. Applicants traverse, but in the interest of advancing the prosecution, claim 7 has been amended

to recite the limitation of claim 16, which was not rejected. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

B. Wang

Claims 7-14 and 97-100 stand rejected as anticipated by Wang. The examiner states that Wang discloses stretches of nucleotides that are 100% identical to SEQ ID NO: 3. Applicants traverse, but in the interest of advancing the prosecution, claim 7 has been amended to recite the limitation of claim 16, which was not rejected. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

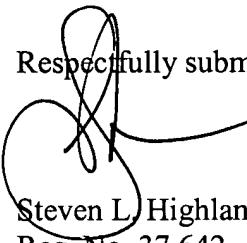
C. Penn

Claims 7-13 and 97-100 stand rejected as anticipated by Pen. The examiner states that Penn discloses stretches of nucleotides that are 100% identical to SEQ ID NO: 3. Applicants traverse, but in the interest of advancing the prosecution, claim 7 has been amended to recite the limitation of claim 16, which was not rejected. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

VI. Conclusion

In light of the foregoing, applicants submit that all claims are in condition for allowance, and an early notification to that effect is earnestly solicited. The examiner is invited to contact the undersigned attorney at (512) 536-3118 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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